

**STATE OF GEORGIA  
REVISED TMDL IMPLEMENTATION PLAN  
CHATTAHOOCHEE RIVER BASIN**

**SEDIMENT (Biota/Habitat Impacted)—0% REDUCTION REQUIRED**

**Prepared by  
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Environmental Protection Division  
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TMDL Implementation Plans are platforms for establishing a course of actions to restore the quality of impaired water bodies in a watershed. They are intended as a continuing process that may be revised as new conditions and information warrant. Procedures will be developed to track and evaluate the implementation of the management practices and activities identified in the plans. Once restored, appropriate management practices and activities will be continued to maintain the water bodies. The overall goal of the Plan is to define a set of actions that will help achieve water quality standards in the state of Georgia.

**This Implementation Plan is applicable to the following segments in the Chattahoochee River Basin:**

<b>Impaired Waterbody</b>	<b>Location</b>	<b>County</b>	<b>Miles/area Impacted</b>
Anneewakee Creek	House Creek to Lake Monroe	Douglas	3
Hitchitee Creek	Caney Creek to Sand Branch	Chattahoochee/ Stewart	5
Little Hitchitee Creek	Headwaters to Hichitee Creek	Chattahoochee	6
Little Juniper Creek	Headwaters to Kings Mill Pond	Marion/ Chattahoochee	6
Little Pine Knot Creek	Headwaters to Pine Knot Creek	Chattahoochee	4
Mineral Springs Branch	Newnan Downstream from Bonnell	Coweta	3
Mt. Hope Branch	Meriwether County	Meriwether	4
Ollie Creek	Meriwether County	Meriwether	1
Pine Knot Creek	Parkers mill Creek to Little Pine Knot Creek	Marion/ Chattahoochee	6
Piney Woods Branch	Headwaters to Tome Keith Rd.	Meriwether	2
Shoal Creek	Headwaters (Mountville) to I-85/Ga. Hwy. 403	Troup	3
Snake Creek	Coweta County	Coweta	4
Tiger Creek	Headwaters to Upatoi Creek, Columbus	Muscogee	5
Wahoo Creek	Upstream Arnco Mills Lake	Coweta	7
Weaver Creek	Headwaters to Sawhatchee Creek	Early	5

## INTRODUCTION

The U.S. Environmental Protection Agency (EPA) and the Georgia Environmental Protection Division (EPD) developed Total Maximum Daily Loads (TMDLs) in 2003 for sediment for streams in the Chattahoochee River Basin with biota/habitat-impacted designation on Georgia's 2002 Section 303(d) List. The biota/habitat-impacted designation indicates that studies have shown a modification of the biological community, which is generally caused by habitat loss due to stream sedimentation. The narrative sediment standard is to prevent objectionable conditions that interfere with legitimate water uses, as stated in Georgia's Rules and Regulations for Water Quality Control Chapter 391-3-6-.03(5)(c):

"All waters shall be free from material related to municipal, industrial, or other discharges which produce turbidity, color, odor or other objectionable conditions which interfere with legitimate water uses."

Fifteen of the listed segments that were found to be impaired due to sediment have shown, based on the current estimated annual loading for the segments, that no reduction in sediment loading is needed to meet water quality standards.

## **DISCUSSION OF POLLUTANT**

Erosion and sedimentation are a major disturbance to stream habitats. Excessive sediment can cause several changes to a stream, such as making the stream shallower and wider, thus affecting the stream's temperature, dissolved oxygen, flow rate and velocity. Excess sediment loads can be detrimental to aquatic life by interfering with photosynthesis, respiration, growth, and reproduction. Sediment can also carry attached nutrients, pesticides, and metals into streams. High turbidity associated with sediment loads also impairs recreational uses and increases the cost of treating drinking water.

## **POLLUTANT SOURCES**

The current loading on these fifteen segments is below the TMDL. It has been determined that the sediment found in these segments is due to past land use practices and is referred to as "legacy" sediment. It is believed that if sediment loads are maintained at current levels then streams will repair themselves over time.

## **PLAN FOR IMPLEMENTATION OF TMDL**

Although sediment load reductions are not needed for these 15 segments, compliance with NPDES permits, diligent application of the Erosion and Sedimentation Control Act and local ordinances to land disturbing activities, and application of Best Management Practices (BMPs) to control sediment delivery from other activities will be necessary to meet the TMDL for these segments. Management practices that may be used to help maintain average annual sediment loads at current levels include:

- Compliance with NPDES permit limits and requirements
- Implementation of GFC's Best Management Practices for Forestry
- Adoption of NRCS Conservation Practices
- Adherence to the Mined Land Use Plan prepared as part of the Surface Mining Permit Application
- Adoption of proper unpaved road maintenance practices
- Implementation of Erosion and Sedimentation Control Plans for land disturbing activities
- Mitigation and prevention of stream bank erosion due to increased streamflow and velocities caused by urban runoff

## **MONITORING PLAN**

The GAEPD has adopted a basin approach to water quality management; an approach that divides Georgia's fourteen major river basins into five groups. This approach provides for additional sampling work to be focused on one of the five basin groups each year and offers a five year planning and assessment cycle. The Chattahoochee and Flint River Basins were the subjects of focused monitoring in 2000 and will again receive focused monitoring in 2005.

## **REFERENCES**

Georgia Rules and Regulations for Water Quality Control, Chapter 391-3-6-.03, Water Use Classifications and Water Quality Standards, Revised February 2004.

GAEPD, 2003. Total Maximum Daily Load Evaluation for Thirty-One Stream Segments in the Chattahoochee River Basin for Sediment (Biota Impacted). January 2003.